

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 0001 Union Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.14	04/12/2017 04/12/2017	Maksim Khashchuk

LM Start		Rating **	M	Issue No.	6
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Flood Preparedness & Training			°	°
				°	°
DWR ID	DWR_RD0001_01_s_2013_6				
Comment Code					
Inspector Comment					
The LMA has not attended a flood fight training class in the past few years. They do have an emergency plan.					

No Photos

LM Start		Rating **	A	Issue No.	8
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Emergency Supplies & Equipment			°	°
				°	°
DWR ID	DWR_RD0001_01_s_2013_8				
Comment Code					
Inspector Comment					
The LMA has emergency supplies on-site.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Unit No. 01 Old River	Right	1.14	04/12/2017 04/12/2017	Maksim Khashchuk

LM Start		Rating **	A	Issue No.	9
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Operations & Maintenance Manuals				
DWR ID	DWR_RD0001_01_s_2013_9				
Comment Code					
Inspector Comment					
The LMA has a copy of the O&M Manual available at the office.					

No Photos

LM Start	0.00	Rating **	M	Issue No.	1
LM End	0.00	Issue Type +	Ma	Location *	WS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR Erosion Survey		37.822306 °	37.822306 °	
			-121.375304 °	-121.375304 °	
DWR ID	DWR_RD0001_01_s_2017_1				
Comment Code					
Inspector Comment					
07/25/2016: No significant change observed. 06/25/2015: No significant change observed. 07/02/2014: No significant change observed. 08/20/2013: No significant change at this site. 08/07/2012: The erosion is at the confluence of Old River and one of its tributary. [2016 Site ID:RD0001U01RM31.4]					

Photo 1 of 3 : SP_2017_RD0001_23_1_20170407_00001.jpg



Upstream view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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LM Start	0.00	Rating **	M	Issue No.	1 (cont)	
LM End	0.00	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR Erosion Survey			37.822306 °		37.822306 °
				-121.375304 °		-121.375304 °
DWR ID	DWR_RD0001_01_s_2017_1					
Comment Code						
Inspector Comment						
07/25/2016: No significant change observed.						
06/25/2015: No significant change observed.						
07/02/2014: No significant change observed.						
08/20/2013: No significant change at this site.						
08/07/2012: The erosion is at the confluence of Old River and one of its tributary. [2016 Site ID:RD0001U01RM31.4]						

Photo 2 of 3 : SP_2017_RD0001_23_1_20170407_00002.jpg



Close view of the erosion.

LM Start	0.00	Rating **	M	Issue No.	1 (cont)
LM End	0.00	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : SP_2017_RD0001_23_1_20170407_00003.jpg



Front view of the site. Note the large tree on site.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.14	04/12/2017 04/12/2017	Maksim Khashchuk

LM Start	0.01	Rating **	A	Issue No.	17
LM End	1.02	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.822435 °	37.812796 °
				-121.375722 °	-121.383933 °
DWR ID	DWR_RD0001_01_s_2017_17				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					
Acceptable vegetation control.					

Photo 1 of 1 : SP_2017_RD0001_23_17_20170417_00016.jpg



View of the acceptable vegetation control on the levee slope.

LM Start	0.17	Rating **	N	Issue No.	12
LM End	0.17	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.821376 °	37.821376 °
				-121.378044 °	-121.378044 °
DWR ID	DWR_RD0001_01_s_2014_12				
Comment Code					
T5 : Tree stumps.					
Inspector Comment					
Remove stump when it becomes rotted to prevent possible seepage path along the roots.					

Photo 1 of 1 : SP_2017_RD0001_23_12_20170407_00010.jpg



View of the tree stump on the waterside levee slope.

LM Start	0.21	Rating **	M	Issue No.	18
LM End	0.21	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.820806 °	37.820806 °
				-121.378260 °	-121.378260 °
DWR ID	DWR_RD0001_01_s_2017_18				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					

Photo 1 of 1 : SP_2017_RD0001_23_18_20170417_00017.jpg



View of the erosion on the levee slope.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.14	04/12/2017 04/12/2017	Maksim Khashchuk

LM Start	0.24	Rating **	C	Issue No.	11
LM End	0.24	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.820362 °	37.820362 °
				-121.378359 °	-121.378359 °
DWR ID	DWR_RD0001_01_s_2014_11				
Comment Code					
MA : Material					
Inspector Comment					
Stockpiled riprap on levee crown. Keep the stockpile so that a vehicle could maneuver around the pile to facilitate visibility and access of the levee.					

No Photos

LM Start	0.44	Rating **	U	Issue No.	14
LM End	0.44	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.818898 °	37.818898 °
				-121.380332 °	-121.380332 °
DWR ID	DWR_RD0001_01_s_2016_14				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
Active rodent den a size of a coyote or fox.					

Photo 1 of 1 : SP_2017_RD0001_23_14_20170407_00011.jpg



View of the large rodent hole on the landside levee slope.

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.14	04/12/2017 04/12/2017	Maksim Khashchuk

LM Start	0.45	Rating **	U	Issue No.	10
LM End	0.45	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.818753 °	37.818753 °
				-121.380249 °	-121.380249 °
DWR ID	DWR_RD0001_01_s_2016_10				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Backfill and compact levee slope with acceptable levee fill.					

Photo 1 of 1 : SP_2017_RD0001_23_10_20170407_00008.jpg



View of the large rodent hole on the landside levee slope.

LM Start	0.51	Rating **	M	Issue No.	5
LM End	0.51	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.818003 °	37.818003 °
				-121.379845 °	-121.379845 °
DWR ID	DWR_RD0001_01_f_2015_5				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
About a 1 ft. vertical cut is observed at the landside levee toe. Repair the landside levee toe per O&M standards.					

Photo 1 of 1 : SP_2017_RD0001_23_5_20170407_00006.jpg



View of the vertical cut at the landside levee toe.

LM Start	0.52	Rating **	M	Issue No.	7
LM End	0.52	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.817825 °	37.817825 °
				-121.379811 °	-121.379811 °
DWR ID	DWR_RD0001_01_s_2016_7				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					

Photo 1 of 1 : SP_2017_RD0001_23_7_20170407_00007.jpg



View of the erosion on the landside levee slope.

* Location
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CR : Crown

** Rating
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+ Issue Type
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Unit No. 01 Old River	Right	1.14	04/12/2017 04/12/2017	Maksim Khashchuk

LM Start	0.67	Rating **	U	Issue No.	15
LM End	0.67	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.817047 °	37.817047 °
				-121.382342 °	-121.382342 °
DWR ID	DWR_RD0001_01_f_2016_15				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
Burrow entrance is about 18 inches by 10 inches.					

Photo 1 of 1 : SP_2017_RD0001_23_15_20170407_00012.jpg



View of the large rodent burrow in the landside levee slope.

LM Start	0.76	Rating **	U	Issue No.	4
LM End	0.76	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.815881 °	37.815881 °
				-121.382704 °	-121.382704 °
DWR ID	DWR_RD0001_01_f_2015_4				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
Large burrow in the landside levee slope. Possible fox den. Cobwebs are visible in the hole. Fall 2016.					

Photo 1 of 1 : SP_2017_RD0001_23_4_20170407_00005.jpg



View of a large rodent hole on the landside levee slope.

* Location
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CR : Crown

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Unit No. 01 Old River	Right	1.14	04/12/2017 04/12/2017	Maksim Khashchuk

LM Start	1.08	Rating **	M	Issue No.	3
LM End	1.08	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.812023 °	37.812023 °
				-121.383961 °	-121.383961 °
DWR ID	DWR_RD0001_01_s_2016_3				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Repair slope damaged by vehicle by placing and compacting acceptable levee material.					

Photo 1 of 1 : SP_2017_RD0001_23_3_20170407_00004.jpg



View of the landside slope damaged by farm equipment.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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